Hazardous Waste Awareness Training

(In accordance with 6 CCR 1007-3, Part 264.16)

Hazardous Waste Management Training Objectives

- Importance of proper hazardous waste management and Fort Carson policies
- Requirements for generators of hazardous waste
- Training requirements
- Basic handling and storage procedures
- Emergency response to hazardous waste fires, explosions, or releases

Hazardous Waste Regulations

- Resource Conservation and Recovery Act (RCRA)
- Federal law passed in 1976 to regulate how hazardous wastes are managed in the USA
- Manage hazardous wastes from point of generation to final point of disposal i.e. from cradle to grave
- Very stringent rules to protect the environment and human health
- All Federal facilities are subject to RCRA and implementation of all aspects of the law
- As a generator and handler of hazardous waste you are required to be aware of the regulations and implement these requirements in everyday operations

Waste Management Hierarchy

Generation - Cradle

Producing a waste at the point of generation

Characterizing

Solid – Hazardous

Hazardous Waste Storage

At Satellite Accumulation Points or turn in to HWSF

Disposal - Grave

Solid Waste or Hazardous Waste

Why Management of Hazardous Waste is Important

- Sustainability –
  - Is the practice of using materials and resources wisely while minimizing wastes
  - Enable limited funding for more important needs
  - Ensures Fort Carson's operational future by protecting what we have today for tomorrows combat forces
- Significant Penalties – under RCRA
  - Consent Orders and Notices of Violation resulting in fines up to $25,000 per day - per violation payable by the generating unit
  - Civil or criminal penalties – jail time for intentional violations
- Safety and Security –
  - Reduction in Soldier/Civilian injuries and exposure to harmful wastes
  - Increases public confidence in Fort Carson's presence in the community

It's the Right Thing To Do!

Fort Carson's Sustainable Hazardous Waste Policies

- Ensure best management practices for the minimization in procurement, use, handling, storage, transportation, and disposal of hazardous wastes
- Use non-hazardous and non-toxic materials to the maximum extent practical
- Conserve resources by reuse, recovery, and recycling
- Obey all Federal, state and local regulations related to hazardous wastes

Definition of Hazardous Waste

- Solid waste is a material which has been used, expended, contaminated with another substance, or degraded in storage and meets any of several regulatory criteria (40 CFR § 261.2)
- Hazardous waste is any solid waste (including waste liquids) found to contain or exhibit certain characteristics or known as a hazardous material which presents a hazard to the environment or risk to human health (40 CFR § 261.3)
- Fort Carson is classified as a Large Quantity Generator of hazardous waste and is subject to many strict rules on its handling

What is a Hazardous Waste?

Hazardous Waste Criteria

- It is a *hazardous waste* if it has specific characteristics
  - Ignitable – easily catches on fire – paint thinner
  - Corrosive – corrodes metal – battery acids
  - Reactive – violent reaction - explosives
  - Toxic – poisons harming humans – mercury
- It is a *hazardous waste* if the product is specifically listed in the RCRA or state law
  - Methyl ethyl ketone (MEK) is a listed waste

Mixture Rule

- Any waste that is derived from a listed hazardous waste, or is a mixture containing listed hazardous waste is by definition a hazardous waste unless proven otherwise
- Small amounts of a hazardous waste mixed into a large amount of a non-hazardous waste makes the entire amount hazardous and more expensive to dispose

DON’T MIX WASTES!

Common Hazardous Wastes

- Used cleaning solvents
- Unusable hazardous materials
- Unusable paints and adhesives
- Used blast media
- Expended smoke pots
- Mask filters (black)
- And many other materials….

Expended Material Handling and Storage Requirements

- Handling of used materials
  - Units/activities must turn-in hazardous wastes by the end of the work shift in which the waste was generated unless they have an approved satellite accumulation point (SAP)
- Fire protection and spill containment/clean-up materials should be located near work areas for emergency use in the event of a fire or spill

Fort Carson's Satellite Accumulation Points

Hazardous Waste Satellite Accumulation Points (SAPs)

- SAPs are DECAM approved designated areas where hazardous wastes are generated at a rate that makes daily turn-in impractical
- Fort Carson has 5 designated SAPs and 5 trained Satellite Accumulation Point Managers (SAPM)
- SAPs may not store more than 55 gallons of hazardous waste
- No treatment of wastes is permitted prior to turn-in without a permit. Example: drying solvent soaked rags, diluting wastes with water, mixing wastes
- SAP locations and authorized users are listed in notes below

Contingency Plan – Emergency Response

The contingency plan describes actions to take in response to a fire, explosion, or release of hazardous waste

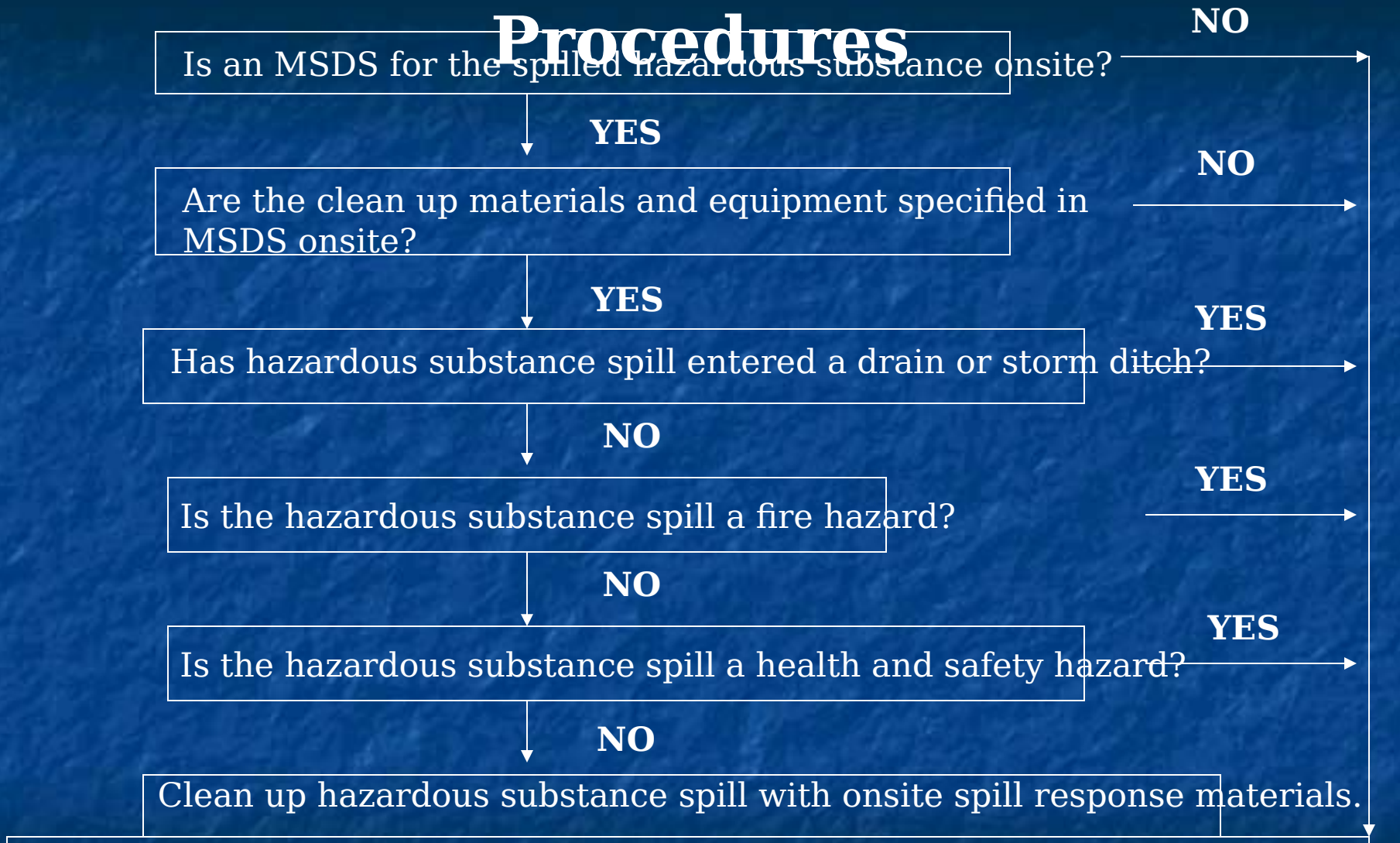
Emergency Response Flow Charts

Following are flow charts for POL products and hazardous waste

Look for these posters in your motorpool area

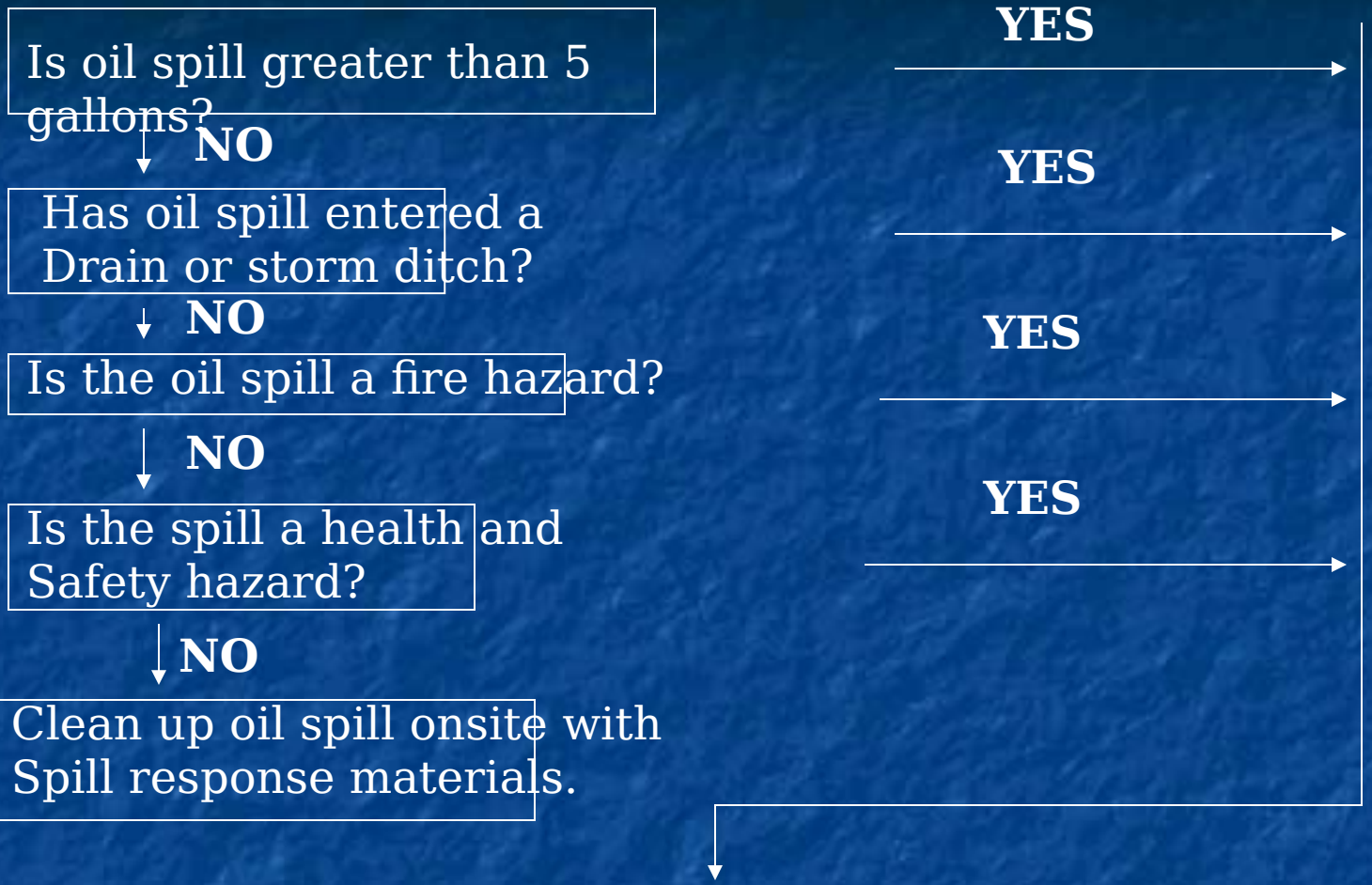
09/02/16

Hazardous Substance Spill Response Procedures


Is an MSDS for the spilled hazardous substance onsite?
NO
YES
Are the clean up materials and equipment specified in MSDS onsite?
NO
YES
Has hazardous substance spill entered a drain or storm ditch?
YES
NO
Is the hazardous substance spill a fire hazard?
YES
NO
Is the hazardous substance spill a health and safety hazard?
YES
NO
Clean up hazardous substance spill with onsite spill response materials.

- Call 911 for Installation Fire Department.
- Without endangering personnel health and safety, prevent further spillage and use c response materials to minimize spill. For questions regarding this procedures, call D

Oil Spill Response Procedures



- Call 911 for installation Fire Department.
- Without endangering personnel health and safety, prevent further oil spillage and use onsite spill response materials to minimize or prevent the oil spill from entering a drain or storm ditch. For questions regarding this procedure, call DECAM at 526-2022.

Hazardous Waste Turn-in

- Units/Activities without a DECAM approved SAP must turn-in or have their hazardous waste picked up by the end of the work shift in which the waste is generated
- All hazardous waste must be turned in to the DECAM permitted storage facility on Butts Road across from Firing Range 51 (i.e., the HWSF) for subsequent management and disposal
- Only individuals who have completed this training are authorized to transport and turn-in hazardous waste at the HWSF

What is Needed for Turn-in?

- What Are You Turning In – WAYTI Sheet
  - Description of material or hazardous waste based on
    - User knowledge of material
    - Material Safety Data Sheet (MSDS)
  - Unit, DODAAC, APC, NSN, Quantity
  - Pharmacy/DRMO serviceability determination
  - Certification by an individual with hazardous waste awareness training
  - Only hazardous waste generated on Fort Carson may be turned in
  - Absolutely no hazardous waste will be accepted from off-post

Requirements for Specific Wastes

- Universal wastes
- Military munitions
- Used oil
- Spent lead-acid vehicle batteries

Universal Wastes

- Universal Wastes include:
  - Lamps: fluorescent, high intensity discharge, mercury halide, neon, high pressure sodium, ultraviolet, ARC & compact fluorescent
  - Batteries (NiCad, lithium, mercury, magnesium, nickel-metal hydride)
  - Aerosol cans

DO NOT STORE!!

Turn in to DECAM within 24 hours

Used Oil

- Used oil is not a hazardous waste
- DO NOT mix with hazardous waste – remember the mixture rule
- Accumulate in approved ConVault or storage tanks
- Label each container with the words **“Used Oil”**
- Maintain in working order, ensure level gauges are operational, document daily inspections, and keep inventory (ullage) records
- Call for pick-up when tank is three-quarters full – DOL Used Oil Contract Manager, 6-2896

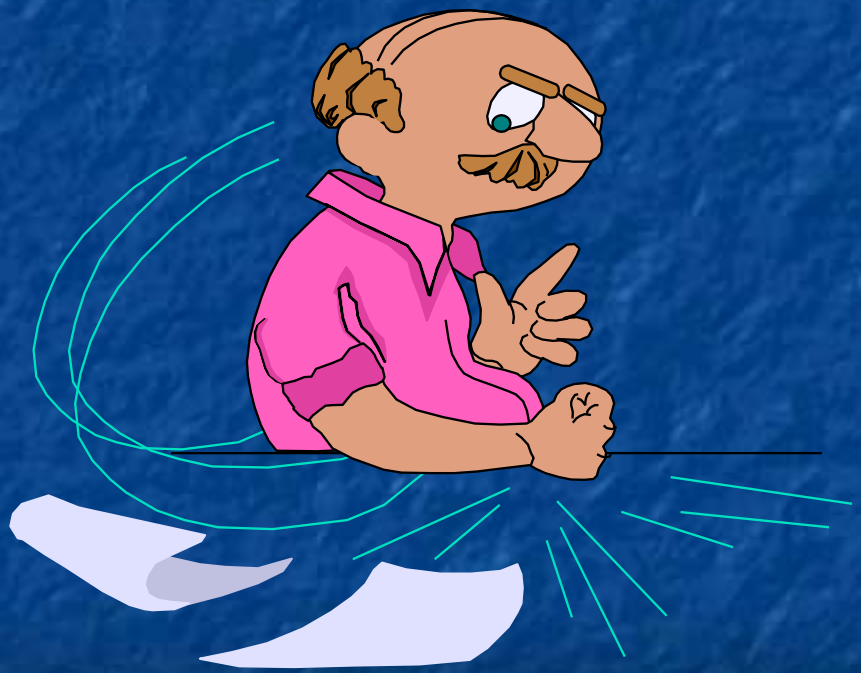
Spent Lead-Acid Vehicle Batteries

- These batteries are recycled
- Batteries should be turned into the DOL under the *one-for-one* Exchange Program
- DOL is the proponent for Lead-Acid Battery recycling
- Store in secondary containment and only with other compatible wastes

Management of Military Munitions

- The only military munitions that are managed as a hazardous waste on Fort Carson are expended smoke pots that must be turned in via the ammunition reclamation point
- Only explosive ordnance disposal personnel are authorized to manage unexploded ordnance and conduct military munitions destruction

Most Frequent Hazardous Waste Violations



- Waste not being turned into the HWSF by end of work shift resulting in unauthorized storage
- Individuals signing WAYTI sheets not hazardous waste awareness trained
- Waste abandonment
- Illegal discharge to sanitary or storm sewers
- Failure to obtain required training and maintain records

Unauthorized Disposal Practices

- Placement of hazardous wastes including liquids (i.e. antifreeze, solvents, or oil, paint, POL products) into dumpsters, sewers or drains, or on the ground is illegal
- Result in severe civil penalties, fines, and criminal enforcement
- Clean up costs will be charged against the unit/activity or individual

Points of Contact

- DECAM HWSF 6-0980
- DOL Used Oil Program Manager 6-2896
- DOL Lead Acid Vehicle Battery Exchange Program Manager 6-5107
- Hazardous Material Control Center 6-4210
- DRMO 6-4480
- DECAM Recycle 6-5898
- DECAM Assistance Team 6-0979
- DECAM Hazardous Waste Program Manager 6-1686
- DECAM EPO Training Coordinator 6-4446

Training Registration & Quiz

Thank you for completing this training. It is critical for the installation to have only trained individuals handling and managing hazardous wastes.

To finalize the training please click below to

Register and Complete Quiz